



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/590,375   | 05/16/2007  | Yan Fu               | 9896-000088/US/NP   | 8405             |
| 27572 7590 03/16/2010<br>HARNES, DICKEY & PIERCE, P.L.C.<br>P.O. BOX 828<br>BLOOMFIELD HILLS, MI 48303 |             |                      |                     |                  |
| EXAMINER   |             |                      |                     |                  |
| ELLIOTT IV, BENJAMIN H   |             |                      |                     |                  |
| ART UNIT   |             | PAPER NUMBER         |                     |                  |
| 2474   |             |                      |                     |                  |
| MAIL DATE  |             | DELIVERY MODE        |                     |                  |
| 03/16/2010   |             | PAPER                |                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/590,375

**Applicant(s)**

FU ET AL.

**Examiner**

BENJAMIN ELLIOTT

**Art Unit**

2474

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 March 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3,6-11,13-17 and 19-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3, 6-11, 13-17, 19-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB06)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. In response to the Office actions mailed 9/28/2009 and 1/21/2010, claims 1, 3, 6-11, 13-17, and 19-23 have been examined and are pending. Claims 21-23 have been added new. Claims 1, 11, 13, 16, and 19 have been amended. No new matter has been added.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/01/2010 has been entered.

#### ***Claim Objections***

3. Claims 3 and 16 are objected to because of the following informalities:
- a) Claim 3 recites "The method according to claim 1, if determining that the..., further comprising:" wherein the language of the claim is grammatically incorrect. Examiner suggests amending the claim to read "The method according to claim 1, wherein the step of determining that the..., further comprises:"
  - b) Claim 16 is objected to being dependant upon a canceled claim.
- Appropriate action is required.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a) Claim 1 is unclear as it recites "a mapping relation between information of multicast users and multicast authorities" and also "a mapping relation between multicast authorities and multicast group addresses". The claim redefines the first "mapping relation". Examiner suggests amending the claim to better distinguish the mapping relations.

b) Claim 1 recites "determining address information of *the multicast user* according to a Virtual Local Area Network Identifier (VLAN ID) carried in the request packet and/or a frame number, slot number and port number of the network equipment to which *the multicast user* is connected". Examiner is unsure to which "multicast user" the limitation is referring, the multicast user established in the presetting of a mapping relation, the at least one multicast user corresponding to different multicast authorities, or the multicast user able to access a plurality of multicast programs. Clarification is respectfully requested.

c) Claim 1 recites "determining whether the multicast user corresponds to a multicast authority according to the mapping relation between address information of multicast users and multicast authorities as well as the address information of the multicast user". The claim is indefinite as it seems to point to a

Art Unit: 2474

previously recited mapping relation, but now redefined by the addition of "as well as the address information of the multicast user". Clarification is respectfully requested.

d) Claim 1 recites "if the multicast user corresponds a multicast authority and the multicast group address carried in the request packet matches a multicast group address corresponding to the multicast authority of the multicast user among the mapping relation between multicast authorities and multicast group addresses". The claim is indefinite. Examiner is unsure to what the multicast user corresponds. Clarification is respectfully requested.

e) Claims 3, 6-10, and 21 are rejected as being dependant upon a rejected base claim.

f) Claim 11 recites "wherein the step of presetting mapping relations comprises presetting a first mapping relation" and also recites "wherein the step of presetting mapping relations comprises presetting a second mapping relation". The claim is indefinite as it appears to redefine the presetting mapping relations. Examiner suggests amending the claim to read "wherein the step of presetting mapping relations further comprises...".

g) Claims 13-16 and 22 are rejected as being dependant upon a rejected base claim.

h) Claim 17 is indefinite as it does not point to a particular apparatus. The mere statement of "A network equipment..." is functional language only establishing an apparatus in the preamble of the claim with no known apparatus to perform the steps included in the body of the claim.

Art Unit: 2474

i) Claims 19, 20, and 23 are rejected as being dependant upon a rejected base claim.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENJAMIN ELLIOTT whose telephone number is (571)270-7163. The examiner can normally be reached on Monday thru Friday, 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung Moe can be reached on (571)272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 2474

/Steven HD Nguyen/  
Primary Examiner, Art Unit 2473

BENJAMIN ELLIOTT  
Examiner  
Art Unit 2474